CHAPTER 1

Introduction

Negotiation books appear to proliferate almost at the rate of self-help titles; that is to say, they emerge with astonishing frequency and number. So, why this one?

WHY ANOTHER NEGOTIATING BOOK?

The prevalent category of negotiating books belongs to the motivational "YOU can do it!" genre. Those books focus on possibilities, an extremely important word in such books, and the secrets (another important word) of realizing those possibilities, secrets that were previously known only to a special priesthood but now, for the modest sum of $19.95, can be yours. Indeed. Such negotiation content is typically laden with tips and tricks, such as the infamous "eyebrow wink," which, when properly done, appears to guarantee not only tremendous financial success but also prosperity in every other human encounter. These books often are woven together within a theatrical construct of actors and scripts, props and plots, staging and intermissions, climax, and postproduction stage party.

As an adjunct to the "YOU can do it!" category, "Tips, Tricks, and Theatre" negotiating books might be distinguished as their own subgroup. Within the broader self-help genre, negotiation has submerged within it a special application of pop psychology directed to personal development and getting others to do what you want by persuasion, tomfoolery, and, of course, the ever-powerful eyebrow winking.[1]

Another prevalent category of negotiating books centers on the use, or misuse, of language, symbols (semiology[2]), meaning, and human psychology. The application context of such books ranges from family matters, to the arena of politics and compromise, union and other class contracts, world geopolitics, and hostage negotiations. These books tend to look at negotiation as a very complex process, which, if one is considering the job of being the

next Middle East peace negotiator, is an enlightened perception. They also deal extensively with historical matters and the related circumstance of rigidly framed perceptions of what is at stake and what is negotiable and what is not.

A third category of negotiating books addresses game or bargaining theory. These books discuss an important subject within the field of modern economic theory. They include such topics as Bayesian Equilibrium and Nash Bargaining and Equilibrium (named after John Nash, now made famous by the recent movie and biography *A Beautiful Mind*). These theories and books tend to be highly symbolic (algebraic) developments of theoretical cases of various negotiating environment models. Such books often attempt to illuminate why people gravitate toward, or accept, various negotiated outcomes based on underlying economic theory mathematically expressed.

This negotiating book does not belong to any of the previous categories. It is a book about practical business negotiations. It focuses on those matters that are, or can be, quantified, modeled, and valued, which is most of what business is about. However, it deals with the important situation in which there is substantial future uncertainty of the value of an opportunity. So, this book is not about negotiating for a carload of paper clips, however important that may be.

Although the discussion, tools, and methods of this book are intended to be of general application, a common context of negotiation, and of this writing, is the transfer of rights and related assets for a technology. However, by the term "technology" it is meant to encompass the broad meaning intended by its Greek root, *techne*,[3] which designates the craft, skill, and know-how associated with making some product or performing some service. This meaning of technology would apply to patented, but not yet commercialized, superconductivity inventions as well as to business models and associated know-how and market presence for a business process such as an internet-based auction service. The envisioned negotiation outcome could range from a nonexclusive transfer of limited rights to such technology to some form of partnership or joint venture to an outright sale (assignment). Likewise, the payment structure could vary across a wide spectrum from royalties on the buyer's future use, to equity in a NEWCO, to some form of annual or event-triggered payments, to a single lump sum payment on closing (or to some combination of structures).

The underlying purpose of this book is to empower negotiation for business-to-business dealmaking of business *opportunities* using analytical tools and planning procedures. One of the important elements of such empowered negotiation is knowing what you should want, in specific circumstances, and specifically why it is reasonable to hold such a view so that it can be communicated to internal stakeholders and people on the other side of the negotiation. It is such a reasoned view that can become the sufficient

basis for ones own convictions, and hope and, importantly, for infecting others. This focus on practical tools and procedures that can be justifiably used in a business context distinguishes the book from a vast catalog of other negotiation books. Our goal then is to develop the tools of analysis with a business preparation process that will lead to a kind of dealmaking, here termed iDealmaking.

iDEALMAKING™

The term *business negotiation* usually conjures up an adversarial process in which prospective buyers wishing to pay zero joust with aspiring sellers wishing to sell for millions and billions. Here, we wish to consider a richer range of meaning for the negotiation context. Business, as in life, operates on choices made in the face of multiple alternatives, including the alternative of making no immediate choice. In any fiscal quarter a business is likely to be confronted with multiple investment opportunities in support of its current technologies, products, and customers; its supporting infrastructure; and new technologies, products, and customers. How should such varied choices be made? In almost every instance, such opportunities and choices are not simple binary, take it or leave it, considerations. Rather, they are commonly available as a range of possible options. In many instances the business enterprise is itself the owner of the opportunity, such as a new technology invented by the research and development (R&D) department. In such circumstances the *negotiation* character of the decision-making process is not always recognized as it should be. For our purposes, each of these opportunities represent not just choices but negotiations in which two parties, whether of the same business entity or not, consider the full range of opportunities for the purposes of making optimal choices using tools and methods presented in this book.

The word *negotiation* can itself be ambiguous. Does it mean only the face-to-face back and forth associated with gaining agreement with the other side? Does it encompass planning for such face-to-face discussion? Is it just compromising?[4] What about the activities and work products used in marketing the opportunity? Term structure? Valuation? Is it not, as it is sometimes said, *all* business is negotiation?[5] As will be discussed in greater detail later, we shall use the term *dealmaking*, for four elements of a business process that leads to business-to-business agreements: Conceiving, Communicating, Comprising,[6] and Consummating—these 4Cs of dealmaking will be defined later in this chapter. *iDealmaking* is a shorthand term we use to encompass these 4Cs in a special, very important type of dealmaking, as discussed in the following sections.

HIGH SIGNIFICANCE, HIGH AMBIGUITY CONTEXTS

Another way of envisioning the scope of this book is shown in Exhibit 1.1. As illustrated, dealmaking opportunities can be segmented by potential value (high and low) and ambiguity of key business terms (again high and low):

- For *low* potential value and *low* ambiguity, dealmaking should occur with a minimum investment of analysis and preparation, but is supported by the substantial availability of business information, such as revenues, margins, market, new production growth potential, and so on.
- For *high* potential value and *low* ambiguity, dealmaking warrants a significant investment to confirm the abundant business information and rationalize it for valuation, negotiation preparation, and agreement purposes.
- For *low* potential value and *high* ambiguity, the power (and complexity) of tools/methods such as Real Options and Monte Carlo may not be warranted.
- For *high* potential value and *high* ambiguity, we have the "sweet spot" for [1]Dealmaking: There is both a lot at stake and traditional data and methods are likely to be inadequate. This quadrant is often characterized

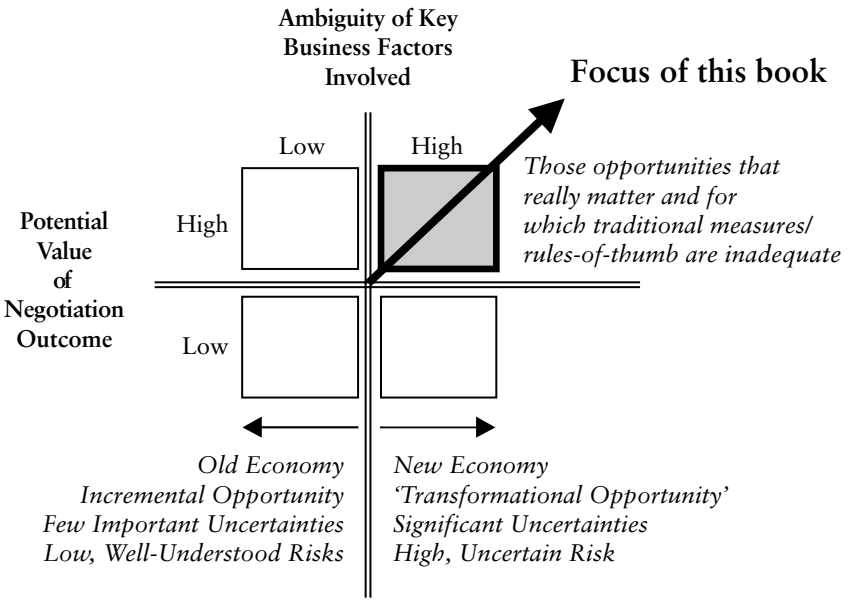


EXHIBIT 1.1 High Value, High Ambiguity Opportunities

by colloquialisms that express the high potential opportunity with the corresponding, inherent uncertainties in the underlying technology, market, or business operation: "transformational," "game-changing," revolutionary, disruptive, new paradigm or paradigm shift, step change, upset (or "tipping point"), "killer app" (deriving from "killer application," often used in software, or quantum leap[7]). When such terms are used they are a strong indication that the opportunity is *high* potential value and, though it may not be overtly recognized, *high* ambiguity (low certainty) often because the transformational model is not achieved by some incremental, obvious new product adoption and growth pattern.

In the late 1990s, with the emergence of the Internet and World Wide Web (WWW), the rapidly increasing power at a rapidly decreasing cost of personal computing, the emergent ubiquity of mobile communication (phones, pagers, PDAs, and laptops), and the corporate information technology (IT) revolution in content availability, data mining, and networking (ethernet, LANs, VPNs, etc.) created a maelstrom of *transformational* business ideas. For a while it appeared that *every* new business idea promised to revolutionize how we lived and worked. These ideas were clearly touted as high opportunity and even the ardent believers generally admitted that they had attendant high uncertainties. At work was another force: time ultraurgency. These opportunities were so compelling, it was thought, and so competitively pursued that there was little time to analyze, quantify, or even—it seemed—to think. It was said that no one could do "Ready, Aim, Fire!" It had to be "Ready, Fire! Aim," or, as it was in many cases, just "Fire! Fire! Fire!" and hope you hit something worth the effort. Even our vocabulary reflected the new urgency by the then common usage of "Internet time." Its initial use was in circa 1994. During that year, the *Wall Street Journal* used the term in its writings just 4 times; in 2000, it was used 43 times.[8] The term conveyed an idea that expressed a behavior that reflected a core belief: The rates of change were so dramatic that time for reasoning was scarce or even nonexistent and the opportunities for success so abundant that the absence of reason was insignificant. Put another way, doing something, anything, had higher value creation opportunity than could be captured by any reasoning process requiring more than the proverbial 15 minutes.

In such absence of reasoned analysis, how were opportunities valued and chosen? Well, the obvious global answer as one surveys the smoldering ruins in 2002 is "not very well." But, specifically, pursuers of such high value/high ambiguity opportunities used two primary methods: (1) simplistic rules of thumb and (2) unstructured auctions. Among the examples of simplistic rules of thumb was the use of $2 million per software "developer" employed in valuing a potential software acquisition target. So, using the first method, if you were considering buying a software company with nominal revenues, but

nowhere close to net earnings, with 500 "developers," you would be prepared to pay $1 billion.

The second method was the use of informal auctions. Potential sellers of opportunities had multiple pursuers. This situation enabled them in many cases to play one bidder off against the other in an informal auction process that they, the seller, controlled. This auction was informal because in most cases the buyers did not know who the other interested parties were, or even if there were truly other interested parties or actual bids. In addition, there were no standardized rules of engagement such as exist, for example, in stock or commodity exchanges or even bankruptcy court auctions. The motives of greed for gain and fear of lost opportunity led many buyers to bid and pay for opportunities far in excess of what they now appear to be worth. The examples of such overpayment are legion. Are auctions really markets, and are markets not reliable? The answer to both questions, in the case of informal auctions when there is a frenzy of buyers with money chasing the 'next big thing' is "no." Could not a potential buyer have, instead, resorted to advanced valuation tools and methods such as are considered in this book? The general belief was "no" because, it was widely believed, that by the time they completed even a cursory analysis the opportunity would have been sold to a buyer unfettered by such concerns who simply looked it over and topped the previous and all competitive bids.

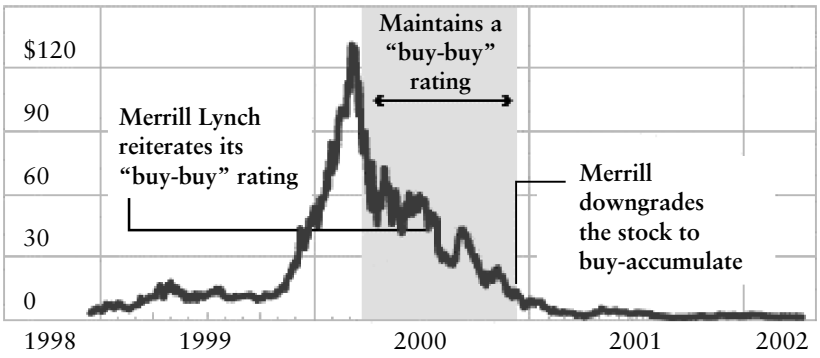
Selecting one illustrative proxy for this point is difficult because there are so many to choose from. Exhibit 1.2 presents an easy to understand example, namely, the public recommendations by a well-known brokerage firm (Merrill Lynch) with respect to a high-flying Internet (dot.com) startup (InfoSpace).

Consider the following as a benchmark for a poor return-on-investment standard. One can purchase a 12-pack of say, Coke® for about $3.00 in no-deposit states or for $3.60 in the 5 states requiring deposits of 5 cents per aluminum can. After consuming the Coke, one's "return" would be 95 percent loss of invested capital in a no-deposit state (each can is 1/29 of a pound and a pound of recyclable aluminum cans is worth about 40 cents) or 83 percent loss of capital if you live in NY, CT, MA, VT, ME, IA, or OR; for those in Michigan (10 cent deposit) the loss of capital would be only 71 percent, and for Californians (2.5 cents) 91 percent. So, we might say that, on average, the "just-drink-your-investment" experiences a loss of invested capital of 90 percent. For many Fire-Fire-Fire dealmakers, they would have done better in terms of enjoyment *and* return on invested capital to have purchased Coke, *the soft drink itself*—not the company—than many of the 1995–2000 merger and acquisition (or equity) investments, our most recent mania, many of which have exhibited declines in value exceeding the just-drink-your-investment benchmark.

We now know that there are allegations that brokerage houses compromised their judgment on stock value by their desire to win investment bank-

BEFORE A FALL . . .

Merrill Lynch initiated coverage of InfoSpace in December 1999 with a rating of 'accumulate-buy' and a price objective of $160. The company's share price fell much faster than its rating.



Sources: Thomson Financial/Datastream; New York Attorney General's office affidavit

EXHIBIT 1.2 Buy Recommendations by Merrill Lynch for InfoSpace

Source: Wall Street Journal: Europe (staff produced copy only) by Ravzin, Philip. Copyright 2000 by Dow Jones & Co. Inc. Reproduced with permission of Dow Jones & Co. Inc. in the format Trade Book via Copyright Clearance Center.

ing business, which may have been joined with less than well-considered merger and acquisition and other dealmaking advice. Whether, or to the extent, that is so, such recommendations would not have been effective if the public markets in large part did not find such counsel credible. The point is that investors and dealmakers, with all the reasoning opportunity in the world, believed such prognostications, to their (in many cases) financial detriment.

Negotiation preparation either by rules of thumb or informal auctions can lead to very damaging results. However, business is about exigency; a scholarly, methodical, patient inquiry into all matters relevant to a potential negotiation is simply not a practicable option. What is needed are reasonable, powerful, quick-to-apply and interpret tools and methods that can assess opportunities and prepare for negotiation. So urgency in preparation is important, but not to the exclusion of a rational, defendable analysis. Developing a rapidly deployable methodology using valuation tools is what [i]Dealmaking and this book are about. As we shall see, the principle tools we apply are Monte Carlo and Real Options.

THE "SO WHAT?" QUESTION

In most business situations one frequently deals with the "so what?" question. If we consider for a moment the internal decision of whether to go forward with some particular investment project, it can be argued that the level of analysis should take into account that all that is needed is the answer to the question of should we go forward or not. A common and powerful tool for making such determination is discounted cash flow analysis leading to a net present value (NPV). Although we treat this subject beginning in Chapter 4, it is useful here to recognize the significance of dealmaking on such decision making. In the case of internal project investment decisions, we can perform a simplistic NPV analysis to sort out those obvious opportunities that have strongly positive NPV values and accordingly should be undertaken, and those that have strongly negative values and should be killed. For purposes of decision making, the only opportunities that justify more careful analysis, such as the use of Monte Carlo or Real Options, are those for which the NPV is near zero. These are the tough calls that hinge on a refined analysis.[9]

In dealmaking, as opposed to internal investment analysis, near-zero NPV projections commonly occur. Consider for a moment a seller and buyer each using the same data on which they make projections and the same overall business assumptions; their calculation of NPV will be identical but for small differences perhaps in some secondary assumptions. In this situation, the seller will try to capture in its sales price the entire positive NPV under the argument that so long as the opportunity has any positive value, a buyer should say "yes" to the deal and terms proposed. Thus, sellers are by their self-interest offering terms that create near-zero NPVs for the buyer. If there are multiple prospective buyers who then engage in a formal or informal bidding context, they will each be driven to increase their bids up to the limit of a zero or near-zero NPV.

So it is common in dealmaking contexts that the decision to proceed or not, from both the seller's and buyer's perspectives, ends up being a close call. In contrast then to many internal investment decision-making situations, the natural contest and context of negotiations warrants the use of the tools and methods we discuss in this book.

VALUATION, PRICING, AND NEGOTIATION

Negotiation is a business process, like sales and R&D. It is closely related to another business process, namely, that of *valuation*. A simple way of thinking of these two processes is: negotiation is getting someone else to accept your valuation as part of a transaction. This perspective is of a one-direction

sequence whereby a valuation process has determined "the number" and handed that number off to the negotiation process to realize such number (or better) by whatever means necessary.

A richer, and better, understanding of the interrelation is that negotiating is the process by which both parties come to a transactable agreement based on independently performed valuations. This view recognizes that although the negotiation process was preceded by a valuation, the process of negotiation will likely cause a revaluation. Also, any negotiation occurs in the context of two valuations, ours and theirs. For an agreement to be reachable, the key parameters of the respective valuation processes must, through the process of negotiation, come to some commonality of terms.

So valuation from our perspective of the deal is an important step of negotiation planning. But valuation from the perspective of the other side is also important to planning. Finally, valuation needs to be an active component of the negotiation itself.

TANGIBLE AND INTANGIBLE CONTENT/VALUE AND THE NEW ECONOMY

The subject matter of many business negotiations is changing as fundamentally as the economic structure of the businesses themselves, from being about the value of tangible things such as machines and buildings, to the right to use intangibles such as information and technology. This shift in underlying business value is often characterized by the term *New Economy*. Although a full discussion of what constitutes such a New Economy deals with broad issues of economic theory and is beyond the scope of this book, it is useful for us to consider some concrete examples. Just 100 years ago (in 1901) the first U.S. company to emerge with a market value of $1 billion ($1.4 billion in authorized capitalization) was U.S. Steel. ($One billion in 1901 is approximately equivalent to $30 billion in 2003.) It achieved such valuation primarily through property, plant, and equipment (PPE), three traditional measures of industrial, tangible value. U.S. Steel, which became USX in 1986, was an icon of the new industrial age and the Old Economy; U.S. Steel in 1901 owned 213 manufacturing plants, 41 mines, 1,000 miles of railroad and employed more than 160,000 people. U.S. Steel's book value, as measured by accountants and reported on the company's balance sheet was substantially determined by its PPE and closely reflected such market value.

One hundred years later, in 2001, the most valuable company in the United States was Microsoft, an icon of the information age and the New Economy, when it reached a market capitalization[10] (or market cap) of $400 billion. Its book value, however, was less than $100 million, reflecting its

relatively modest PPE ownership of land, buildings, and various capital equipment (office furniture, computers, communications networks and devices, and certain equipment associated with its making and shipping CD-ROMs and manuals). How can a rational market ascribe a value to Microsoft that is 4,000 times its book (tangible) value? The answer lies in the very significant *intangible* value associated with Microsoft's copyrighted software, which is just a string of 1s and 0s, bits, in an archived Microsoft facility; know-how and patents; and its trademark and tradename value.[11]

Yet another measure of the transformation of the U.S. economy is evident in transportation. In the first decade of the 20th century, ca. 60 percent of companies traded on The New York Stock Exchange were railroads, entities that stored and shipped things with mass. During the first decade of the twenty-first century our market economy is led by companies like Microsoft, IBM, Cisco, SBC that store and ship massless data bits.

Think of the effect on a negotiation to buy or sell some component of the respective assets of a U.S. Steel in 1901 versus Microsoft in 2001. In the case of U.S. Steel we would be characterizing something tangible using available standards of reference for transactions of other like tangibles to guide both our valuation and negotiation preparation.

THE iDEALMAKING PROCESS

As introduced previously, iDealmaking can be considered by thinking about 4Cs: Conceiving, Communicating, Comprising, and Consummating. Conceiving is the business activity of deal imagining. What would a deal look like that would be good for us, and for the parties we conceive to be on the other side of the transaction? Why should we do this? (And, perhaps, why not?) What strategic, or tactical, underlying purpose motivates such deal conceiving? What is the prize that we seek? What is the answer to the skeptic's 'so what' question, which could be sarcastically expressed by "big deal!" meaning, really, "small deal" or deal not worth the time and investment? What motivates us, really, to want to go through all this? So, deal Conceiving is about answering the strategic intent and underlying purpose questions, and it includes deal planning as to resources and time required and organizational issues. It also includes developing both a Plan A and a Plan B, issues that we will return to in Chapter 11.

Communicating, our 2nd C, includes the obvious activities of managing information flow on my side of the dealmaking, and to the other side. But it also includes all the issues associated with deal-marketing. How will the opportunity, or my reaction to a presented opportunity, be communicated? What aspects can be communicated without a confidentiality agreement? When and how does a confidentiality agreement become necessary? How do I pack-

age the written description (sometimes known as the Offering Memorandum, or a less formal Opportunity Memorandum, or simply 'the Book')? How do I decide to whom it gets presented and in what way it is presented? How can I do active learning based on the feedback from initial discussions? How will I manage all the varied levels of communication needs on the deal team and with others in my organization who have varying needs to know deal status and dealmaking planning? How do I communicate the deal price and terms or structure, or counter offers on price and terms or structure, and how do such relate to underlying deal value? iDealmaking Communicating includes the plan for how one's interest in the dealmaking process and sought-for outcome will be made known to the other side in a defendable, persuasive way. We will consider these matters in Chapter 10.

Comprising, our 3rd C, is about configuring a deal that creates optimum value for both the seller and the buyer. iDealmaking Comprising is the process of making adjustments in the course of the back and forth of communications to make the terms more favorable for all sides. "Compromising," which suggests retraction of one's terms, could be one way of such "comprising." However, in many circumstances adjustments can be made in the prospective terms of the agreement that make its value more attractive to the other side without harming the interests or value of one's own side. Comprising, then, is not just conceding some thing of value to our side but could be conceiving an alternative deal structure that is of more value to the other side while of constant or even greater value to our side. The metaphor we will use for enabling this process is the Box and the Wheelbarrow: The Box is the content and terms of what the seller is offering, and the Wheelbarrow is for the structure and magnitude for what the buyer is paying. We will introduce the Box and Wheelbarrow in Chapter 3, and return to matters of pricing such elements in Chapter 9.

Finally, Consummating, our final C, is about gaining agreement with all affected parties both internally and on the other side. This may involve revisiting Conceiving, to imagine an entirely different deal structure or even a Plan B. It almost always involves Comprising as in putting the seller's offer (the Box) and buyer's offer (the Wheelbarrow) in alternative more beneficial frameworks and perhaps values. It certainly involves Communicating to understand and express the issues and difficulties impeding agreement in ways that can, if at all possible, lead to new ways of meeting needs and objectives. For high-complexity situations with diverse interests and views across and amongst each side, negotiations can become interminable. It is normally valuable and necessary to have as an aspect of Consummation a strategy for achieving some form of closure.

Underlying all these Cs is the use of tools and methods of analysis and valuation. Such method based analysis is the heart of iDealmaking. Chapters 4, 5, 6, and 7 develop such tools and methods of discounted cash flow and

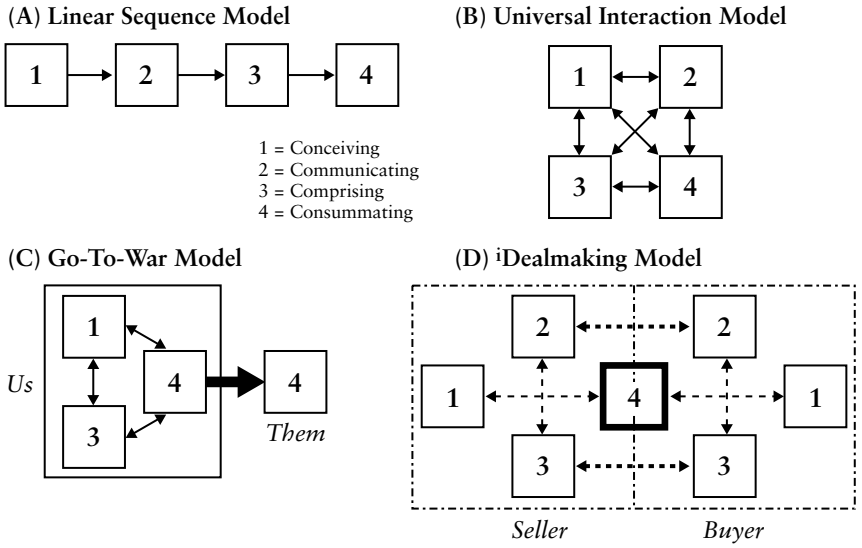


EXHIBIT 1.3 Sequencing the 4Cs of iDealmaking

net present value analysis, scenario conception, Monte Carlo methods and analysis, and the use of Real Options methods.

Breaking down iDealmaking into these 4C elements leads to the question of do they, or how do they, interrelate? Shown in Exhibit 1.3 are several inaccurate portrayals and one that might be helpful.

Shown in (A) of the above exhibit is the "Linear Sequence" model of the 4Cs, namely: You finish Conceiving, then, and only then, you go to Communicating, and so forth, much like a stage-gate project development, or pinball, process. However, as we shall see, these processes are interrelated and intertwined that even though Conceiving commonly occurs first, it is not a one-time process.

Shown in (B) is the opposite configuration, namely all the elements interact with one another throughout iDealmaking. This is closer to being a realistic portrayal but is still incomplete.

In (C) we see the go-to-war perspective, namely: the Conceiving, Communicating, and Comprising all take place internally, get locked-and-loaded, and like a missile is sent to hit a target (and often with intent to kill).

The most-useful portrayal is shown in (D). The first three Cs should be developed as an interacting unit for the purpose of reaching agreement with an outside party, but instead of it being a fixed triangle of a deal it should be developed more as a lock and key arrangement that fits with a mirrored configuration on the other side. The Consummation is really about all the Cs fitting together on both sides.

ORGANIZATION OF THE BOOK

In Chapters 2 and 3, we consider some of the important background issues of negotiation planning. In Chapter 4 we illustrate scenario building using discounted cash flow (DCF) and NPV calculations based on both risk-adjusted rates and probability trees. We also introduce Monte Carlo modeling. Then in Chapter 5 we cover in detail the Monte Carlo method of valuation and negotiation planning

In Chapter 6 we introduce the concept of Real Options. Also we cover the important idea of Black-Scholes option pricing. Then in Chapter 7 we cover in detail the Real Option method of valuation and negotiation planning.

In Chapter 8 we explore the twin ideas of knowledge and certainty for the purpose of gaining an understanding of how to comprehend the results of the methods and tools just considered. Then in Chapter 9 we consider pricing and term sheets. Chapter 10 covers negotiation perspectives and planning.

Finally, in Chapters 11 and 12 we consider the very important idea of having a "Plan B," and some concluding observations.

NOTES

1. For the inveterately curious, the eyebrow wink is the act of lifting one's eyebrow on approaching another person to establish contact and rapport. It has been studied in many cultures, including that of apes, and is generally taken as friendly precursor to verbal and physical contact. Political consultants, in particular, counsel their clients to do "eyebrow pushups" to "open up the face."
2. Semiology is the study of signs and their meanings, such as costuming of person or office.
3. Aristotle defined *techne* as a capacity to do or make something with a correct understanding of the principle involved. So this book may be thought, I hope, as a *techne* about the business process of negotiation of *techne* opportunities. (*Techne* itself comes from the Indo-European root *tekth* meaning to weave or join, which is the source of the Latin word *texere* meaning to weave or build.)
4. Ambrose Bierce in his devious book of definitions, *The Devil's Dictionary* (1881–1906), defined "compromise" as: "Such adjustment of conflicting interests as gives each adversary the satisfaction of thinking he has got what he ought not to have, and is deprived on nothing except what was justly his due."
5. In fact the very word negotiate originates from the Latin word to transact business in contrast to acts of leisure: *neg-* (Latin for "not") and *otium* (for "leisure").
6. *Comprising*, for putting things together in certain beneficial ways, not *compromising* which can mean simply giving up something important in the interest of some other point of harmony. This distinction will be addressed later in the book.
7. The widely used phrase "quantum leap" is surely the most ironic. A quantum is the *smallest* unit of energy change in the universe. So "quantum leap" is oxymoronic.

8. "How Internet Time's Fifteen Minutes of Fame Ran Out," *Wall Street Journal*, October 28, 2002, p. B1.
9. There is a common corporate trend for skewing the numbers to make them conform to what some project champion, perhaps you, wants to do anyway. A favored project may have embedded in it a web of assumptions that cause it to have a highly positive NPV, and conversely for an unfavored project. Unless there is some independent, unbiased control over the assumption "dials," an investment committee can easily be presented with the easy decision making caused by a portfolio exhibiting a bimodal distribution of good and bad investments. This tactic can easily create a feedback loop much like the game of liar's poker: How much can I skew my project's assumptions to make its NPV sufficiently large that it is committed to without scrutiny into the kited numbers used to bias the decision?

    Even in this circumstance, Monte Carlo or Real Options can be warranted because of the limitations of discounting all future cash flows by a single discount value, a subject discussed in Chapter 4.
10. Determined by the number of shares outstanding multiplied by the market price per share.
11. In both the U.S. Steel and the Microsoft examples, I have used market capitalization as the measure of company value. A more complete picture of total enterprise value would use the sum of equity and debt. In the case of Microsoft, debt is negligible compared to its equity value.